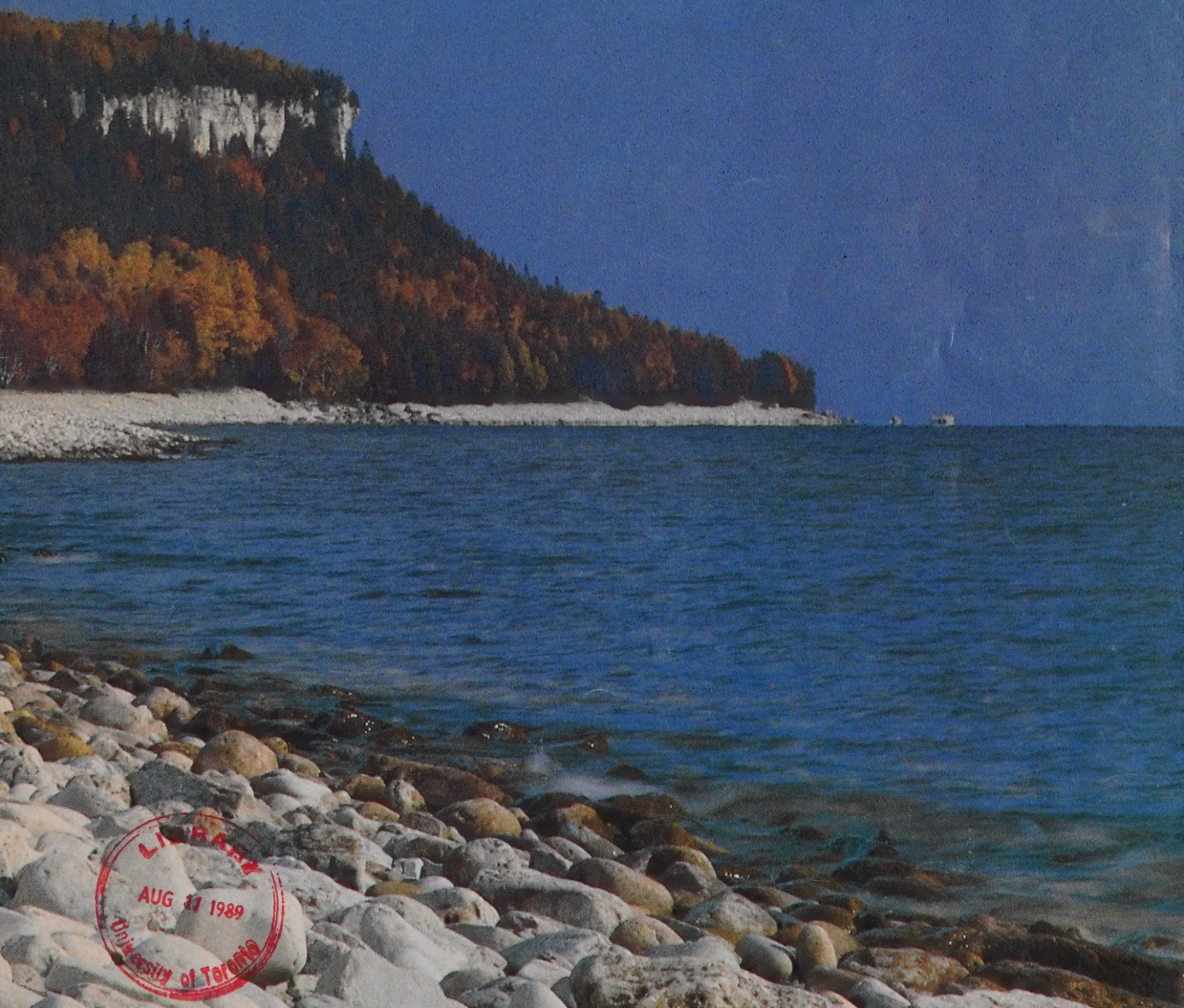


# CUESTA

The Niagara Escarpment Magazine

1989

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# Minister's Greeting

I welcome this opportunity to send greetings to **Cuesta** readers and to share with you some developments with regard to the implementation of the Niagara Escarpment Plan.

The Plan was designed to ensure the conservation of a valuable provincial heritage—the Niagara Escarpment and its vicinity, providing for development compatible with that conservation.

The Plan is part of the government's commitment to balanced planning for the Escarpment, while conserving its irreplaceable natural environment and cultural assets. I have been heartened by the extent to which this commitment is shared throughout our society.

These goals have been furthered through two measures which I recently announced in partnership with the Minister of Natural Resources.

The Ontario Conservation Land Tax Reduction Program now provides property tax rebates to private landowners undertaking to conserve our natural heritage. This tangible support includes lands designated "Escarpment Natural" in the Niagara Escarpment Plan, and other important natural areas. Recently as well, we jointly released the draft Policy Statement under the Planning Act to encourage private conservation of Ontario's wetlands.

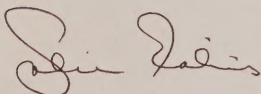
As part of the continuing process of scrutiny of our methods and procedures, my ministry commissioned an independent administrative review of the Niagara Escarpment Program. The CRESAP Report, as that review is called, is now being studied by our program partners, with a view to implementing its recommendations.

This year and next, my ministry and the Niagara Escarpment Commission will undertake preparatory work for the Five Year Review which, under the Niagara Escarpment Planning and Development Act, is to commence not later than mid-1990.

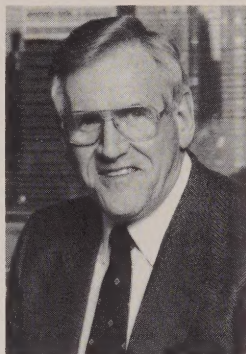
I would like to take this opportunity to express my appreciation to the Niagara Escarpment Commission for the commitment it brings to its mandate, and its assistance and co-operation in Plan implementation.

Quite fittingly the Commission's Chairman, Terk Bayly, has this year been presented with a National Heritage Award by the Minister of the Environment for Canada. This honour exemplifies the respect which both the Chairman and the Commission have earned in discharging their important duties.

Yours sincerely,



John Eakins  
Minister of Municipal Affairs, M.P.P. Victoria-Haliburton



# Chairman's Report

The bird's eye view of south-central Ontario is a patchwork quilt—neatly drawn squares here, an odd scrap there—sewn together with roads, fences and hedgerows.

Sometimes, the design follows the lay of the land; a strand of highway matches a river course, a woodlot traces the warp of a ridge.

Then there are geometric grids, an order established almost 200 years ago when surveyors first laid their measuring chains to mark Crown land grants.

In farm fields, patterns are repeated on a smaller scale and the order is again part nature, part humanity. One piece of land is good for wheat, another supports corn, another is pasture—neighbouring crops separated only by furrow or wire.

Back on the ground, it's not as clear as it is in the air. In this thriving part of the province, a three-hour drive in any direction takes you through an intricate mix of wilderness, farm, town and city.

Ontario's Niagara Escarpment is in the middle of it all, a narrow band where humanity and nature converge like nowhere else in Canada. Often, the distinctions and transitions between the land we use and the land we reserve are not immediately clear.

This is precisely why the people of Ontario created the Niagara Escarpment Plan. Here, we recognize nature as a vital partner in our progress.

Granted, questions of need, preservation, utility and conservation are still bundled in ongoing dialogue.

I have the privilege of hearing many perspectives, whether in meetings with landowners, or with special interest groups, or at Niagara Escarpment Commission meetings, where the commissioners themselves represent a wide range of public and municipal interests.

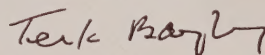
It can be complex but, at the same time, that input has helped make the Commission's responsibility for the Escarpment clearer than ever.

We must demonstrate vision in environmental and community planning in consultation with the public and all levels of government. And we must ensure that local considerations with respect to land use take into account current and future needs for a balanced provincial, national and world environment.

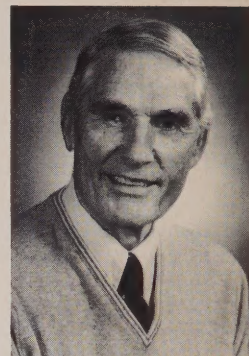
As well, it's essential that we work closely with conservation and heritage agencies to combine land-use planning with Ontario's rich natural and cultural history.

The quilt is far from complete. But with your help, and that of our Minister and partner agencies, we are getting better at our craft.

Yours sincerely,



G.H.U. (Terk) Bayly  
Chairman, Niagara Escarpment Commission







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**CUESTA** Originally a Spanish term meaning flank or slope of a hill, in geological terms means a ridge composed of gently dipping rock strata with a long gradual slope on one side, and a relatively steep scarp on the other

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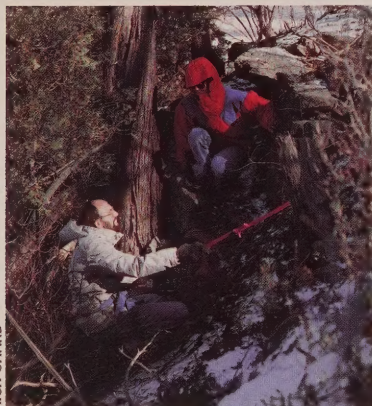
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# ESCARPMENT OUTLOOK



RICK CHARD

## ANCIENT CEDARS

"IT WOULDN'T SURPRISE ME NOW TO find trees that are 1000 years old," says Doug Larson.

The University of Guelph professor has discovered a number of ancient cedar trees on the Niagara Escarpment near Milton, Ontario. The oldest of the trees has initially been dated at 723 years, which more than doubles the previous record for the oldest living trees in Ontario and adds more than 300 years to the previously known maximum lifetime of cedars.

Dr. Larson, an Associate Professor of Botany at the University, thinks there could be several more stands of the ancient eastern white cedars along the Escarpment, and his research has taken him north to the Owen Sound area to take core samples there.

Other old-growth trees throughout southern Ontario have died because of logging, forest fires and clearing for settlement. The cedars, clinging to the inaccessible Escarpment cliffs, were protected from the ravages of nature and civilization. But though the Escarpment put them out of harm's way, it also afforded them poor growing conditions. Many of the trees are rooted in very shallow soil; some are growing out of the limestone cliff face itself.

For this reason, despite their great age, the trees are no more than seven metres tall, about half the normal height for their species. In some years, the annual rings of new wood, laid down as the trees grew, are a mere two cells thick. Normally, the only plants to grow that slowly are mosses and lichens.

With funding from the Natural Science and Engineering Council, Dr. Larson and five colleagues have been intensively studying every aspect of the Niagara Escarpment's cliff face ecology for the past three years. One scientist is studying fern species; another is looking at disturbances caused by hiking, while a third is studying the microclimates of the Escarpment face. One student has been taking measurements of about 10 different climatic variables every ten minutes for 18 months.

As a routine part of their study of cliff face flora, Larson took core samples from the trunks of the cedars so that their annual rings could be counted and their age established. The scientists were amazed by the age of the trees.

The cedars will become an important scientific tool. For dendrochronologists—people who study annual rings in tree trunks—the trees will fill a gap in their records for eastern North America.

In the west, where dendrochronology originated, there are plenty of old trees such as Sitka spruce and western red cedar, which can live for 2000 years. The southeast (Florida and Georgia) has Bald cypresses that are up to 1000 years old.

But from the Rocky Mountains eastward, there has been a shortage of old trees to study. The prairies have very little woody vegetation, and northeastern North America has few remaining stands of ancient trees because it is heavily populated and settled.

Dr. Larson admits to one disappointment in the study. Because the trees are growing right beside Highway 401, he was hoping that an analysis of core samples would tell us about the impact of atmospheric pollution from automotive exhausts since the 401 was built. "By scanning from the centre of the tree out to the edges, you're able to see if there is a sudden increase in lead, cadmium and other metals found in exhaust," says Dr. Larson.

But when he scanned a 155-year-old sample under an x-ray probe on an electron microscope, he found heavy metals from car exhaust down to the heart of the wood.

Eastern white cedars may turn out to be Canada's version of the Bristlecone pine, the southwestern U.S. tree which has been dated at 5000 years. An 800-year-old cedar was found in the boreal forest of Quebec last summer. The two recent finds of ancient cedars are giving botanists a new respect for the species, which was formerly thought to live only 300 to 400 years.

## INTERNATIONAL STATUS FOR ESCARPMENT?

WHAT DO YOU GET WHEN YOU TAKE A natural feature; add a one-of-a-kind environmental land use plan, and sprinkle it with a dash of civilization? Global recognition, it seems—courtesy of the United Nations.

By 1990, the Niagara Escarpment could be Canada's newest link in a diverse international chain of sites that make up the Man and the Biosphere program.

The MAB program, sponsored by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), has been working to establish a world-wide dialogue on the concept of sustainable development; living within our ecological means. Over the past 18 years, the program has established a network of 270 designated "Biosphere Reserves" involving 70 nations.

These reserves unite some of the earth's most famous lands, including the Florida Everglades, Ayers Rock in Australia and the Galapagos Islands, to name but a few. In Canada, designations include Waterton Lakes in Alberta, Riding Mountain in Manitoba, and Quebec's Charlesvoix and Mount St. Hilaire reserves. The only other Ontario reserve is situated at Long Point off Lake Erie's north shore.

The appointed MAB Canada Committee, a fifteen member volunteer task force from across



*potential responses  
land development*

Canada, has expressed strong interest in having the Escarpment become Canada's sixth Biosphere Reserve. A nomination to designate The Escarpment, was endorsed by the Committee in June of this year. It will be carried to UNESCO Headquarters in France for final approval, a process that could take until 1991.

For the initial nomination, a reserve must have a protected natural area, a resource management method, and a settled outer area where civilization interacts with the environment. "Essentially, the Escarpment is a Biosphere Reserve now, only without MAB recognition," says MAB Canada representative, Dr. George Francis, a Professor of Environmental Studies at the University of Waterloo.

Not one of the existing Canadian reserves has a land-use program as comprehensive as the Niagara Escarpment Plan, Canada's first large scale environmental land-use plan. Dr. Francis notes that the Escarpment and its plan are comparable to a number of European reserves with respect to the types of agriculture and proximity of urban development.

As such, the ongoing dialogue between such similar reserves will include planners, land-owners, researchers, and governments who will be able to compare notes on methods and experience through MAB exchange programs. MAB sees its role as educational rather than supervisory, so a reserve designation for the Escarpment won't affect existing development control programs.

## BRINGING CONSERVATION TO THEIR HOMESTEADS

"ARDCAEIN"—THE GAELIC WORD FOR overseer—was what J.H. McKnight called the summer home overlooking his 1880s quarry on the Forks of the Credit. The property now belongs to Beverly and John Holden, McKnight's granddaughter and husband, and its name provides an old twist to a new theme—individual land stewardship; expressing care for the environment by what you do on your own land.



The environment is a top concern with Canadians and we're not looking only to government for solutions. With recycling boxes at curbside and wildlife habitats in our backyards, it's clear that more people are taking a closer look at the old homestead.

Along the Niagara Escarpment, the proof is coming from a face-to-face landowner contact program run by the University of Guelph's Land Resource Science Department in cooperation with the Ontario Heritage Foundation and the Natural Heritage League.

"It all starts with our showing landowners how important they are to the environment they live in by showing them what they own," says Tom Moull, U of G Research Associate and one of the coordinators for the Natural Heritage Stewardship Pilot Project. It works—more than 80 per cent of the landowners contacted said they liked the idea of taking personal responsibility for the natural features of their properties.

John Holden has always had a keen interest in his Forks of the Credit property. He can tell you about the stone J.H. McKnight quarried and how it went to build the provincial legislature. He can show you the remains of old lime kilns, barely visible through the dense undergrowth, reminders of an early industry. As for natural features, he appreciated the visit from the study team. "They showed me plants that I didn't know I had," he says with new pride.

The landowner contact program was started in 1983 in the Carolinian Zone of southwestern Ontario, where flora and fauna more at home in the southern U.S., boldly survive in a unique Canadian banana belt along Lakes Erie and Ontario. The program's success here paved the way for its expansion in the summer of 1988 to the Niagara Escarpment, which Moull sees as another "distinct natural entity" in the province.

The pilot project study team, Dr. Stewart Hilts, Moull, and four other researchers, contacted 147 landowners in areas covered by the Niagara Escarpment Plan in Grey County and Niagara and Peel Regions.

This initial study group represents 1726 hectares of land covering a wide range of land uses including farm, recreation, rural estate and near-urban. All the sites contain provincially recognized Areas of Natural and Scientific Interest, significant for uncommon geologic formations or as habitats for rare and endangered plants and animals.

This year, 76 landowners were presented with Natural Heritage Stewardship Plaques signed by Premier David Peterson and Ontario Heritage Foundation Chairman Richard Alway. The award is in return for an informal handshake agreement to preserve their properties. This involves giving the Natural Heritage League 90 days notice of sale or development and telling the NHL about threats to the area such as intensive lumbering or changes to drainage patterns.

As a result of the pilot project's success, Hilts, Moull and company will continue the Escarpment study through to 1991, contacting another 450 landowners. As for John Holden, he says the program helps link landowners who share a common concern for their local environment.

For more on landowner contact, call Dr. Stewart Hilts or Tom Moull, University of Guelph, (519) 824-4120, Ext. 8329.

## GREY-SAUBLE STUDY REVEALS RARE SPECIES

ELEVEN RARE SPECIES, INCLUDING SOME never before found in Grey County, have been discovered through a detailed inventory of several Grey Sauble Conservation Authority properties located along the Niagara Escarpment.

In all, the report of five properties lists an amazing 433 plants, 68 birds, 10 mammals and 10 reptile species, plus sites of geological significance, confirming what local naturalists have long felt—that this part of the Niagara Escarpment is very special.

The properties studied were the Slough of Despond and Lindenwood, north of the City of Owen Sound; Bognor Marsh and Rocklyn Creek, to the southeast; and part of the Beaver Valley's Old Baldy Conservation Area. Each of these forested areas is a part of the Niagara Escarpment Parks System, used by the public for hiking, nature walks and cross-country skiing.

During the summer and fall of 1987, intensive field studies were carried out by survey authors Leslie Piercey and David Bradley, with assistance from local naturalists. Maps, air photos and deeds were carefully studied, and 300 hours were spent walking the 451 hectares of property.

All species, geological formations and features, plus major soil types were identified, classified then noted and summarized on site maps to create the final 83-page report.

The provincially rare, and nationally endangered, hart's tongue fern was abundant throughout the study area; in fact, Grey County is home to the world's largest concentration of this delicate fern.

Two other nationally and provincially rare plant species were identified: *Carex appalachica*, a type of sedge and *Panax quin-*

*quefolius*, a variety of ginseng. The three samples of *Carex appalachica* discovered at the Slough of Despond mark the first record of this species anywhere in the county.

Case's ladies' tresses and green adder's mouth, two regionally rare plants also found at the Slough of Despond had never been previously recorded in Grey County. Other regionally rare plant species were ebony spleenwort, checkered rattlesnake plantain, downy rattlesnake plantain, tall white bog orchid and squaw root.

Only one rare animal species, the pickerel frog was identified; however some of the other species found were surprising because they were well outside their expected range.

Overall, the Slough of Despond was the most botanically significant area surveyed, with six rare species. According to Anne Lennox Brindle, Forestry and Wildlife Coordinator for the Grey Sauble Conservation Authority, the diversity of plants found at the Slough of Despond was the survey's most surprising find.

The study was commissioned by the conservation authority, which plans to institute forest management techniques while protecting sensitive natural features; the inventory is the first step.

Along with some site specific recommendations, the report recommends that locations of rare plant species be marked with protection zones.

The study goes on to suggest that logging be prohibited and forest management be minimal within an Escarpment protection zone 100 metres back from the brow, talus slope and steep slopes below the Escarpment.

Funding for the survey was provided through a grant from the Niagara Escarpment Trust Fund, administered by the Ontario Heritage Foundation.







# Reds of Grey

THE NIAGARA PENINSULA GROWS peaches. The Canadian Shield is famous for its blueberries. But for big, juicy McIntosh apples, the place to go is the Beaver Valley.

On either side of the meandering Beaver River, the broad, fertile fields are planted with row upon countless row of compact apple trees—mostly McIntosh and northern Spy—that produce an impressive 20% of Ontario's apple crop, or close to 2 million bushels. In a square bounded by the hamlets of Heathcote and Ravenna, and running northward to Georgian Bay, there are 2000 hectares of orchards. Another 1000 hectares of apple orchards in the Meaford area make apples big business in this part of Grey County.

If you ask an Ontario resident where in the province apples are grown, he or she

will probably suggest the Niagara Peninsula. Grey County is not well known for apples. And yet more apples grow in Grey County than in any other county in Ontario. Apples are the area's biggest industry, with a farm gate value of more than \$8 million.

In March, when all of nature still seems fast asleep under a crusty blanket of snow, apple growers are already hard at work, ruthlessly pruning the small trees into the conical, Christmas tree shape that gives them the best crop. Around the beginning of May, before the buds open, the trees are sprayed with fungicides to keep apple scab in check.

With the coming of summer, apple growers don't just sit back and watch their apples grow. Every ten days or so until the beginning of August the trees must be sprayed to protect them from attack by dozens of insects and diseases. And then there is summer pruning—a relatively recent development in apple horticulture. Pruning back the new suckers allows more light to get at the apples. It isn't necessary for their development, but it gives apples the beautiful red colour that consumers love.

The apple harvest runs from September 15 to November 15, when about 3000 extra apple pickers descend on the valley. Of these, about 800 are from offshore—mostly the Caribbean islands and Mexico. Apple festivals bring carloads of visitors to the area, and roadside stands offer cider, apple butter, apple jams and jellies, pies, and of course, apples by the bushel.

Some Beaver Valley apples end up in the lunch boxes of British school children, since most of the export crop goes to England and Scotland. Other markets include western Canada, the southern United States, the Caribbean, even Scan-

Story by  
Lorraine Brown  
Photographs by  
Willy Waterton

dinavia in some years. But most are sold in Ontario.

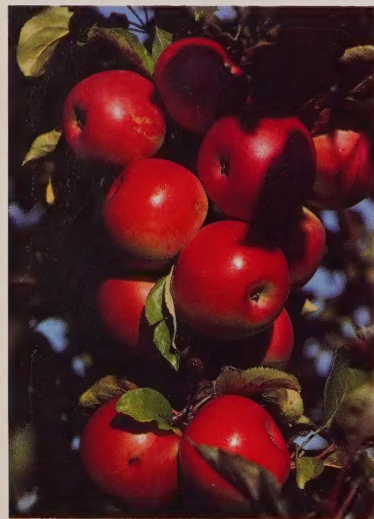
Even before the area was settled, surveyors and explorers had remarked on the suitability of the Beaver Valley and surrounding farmland for growing fruit. In 1835, James Carson, who settled further north near Cape Rich, described the land as follows:

level land for farming, which with its shore front and sheltered by the hills, behind, would be safe from late and early frosts, and would be an ideal spot for fruit growing.

Carson showed a great deal of horticultural insight. The "hills behind" are the Niagara Escarpment, which, along with nearby Georgian Bay, creates the climatic conditions that make the Beaver Valley region so perfectly suited to apple production.

According to Ken Wilson, horticultural crop advisor with the Ministry of Agriculture and Food in Clarksburg, a unique microclimate exists in this area. The deep, cold waters of Georgian Bay provide cool breezes which keep the land along the waterfront cool well into the spring. Sixteen kilometres back from the Bay, there are no more apple orchards, since the moderating effect of the bay is lost.

The Niagara Escarpment adds to Georgian Bay's moderating influence. It prevents the warmer air further inland from moving into the apple-producing area. The result is a delay in the onset of spring. The trees are also slowed down in their





development, so that blossoming does not occur until late May. By that time the danger of frost is pretty well past. In late fall, the bay (now warmer than the surrounding air) and the escarpment continue to moderate the climate in the same way, making early fall frosts unlikely.

While much of the Thornbury-Meaford area is good apple country, the Beaver Valley boasts an additional feature that makes it even better. As glaciers retreated from the valley, they left behind a rich layer of sandy loam and silty clay that provides a well-drained soil, deep enough to permit the trees to develop good roots. Settlers who tried to grow apple trees higher on the escarpment in heavy clay soil soon realized that trees did better in the lower ground, and there the orchards gradually expanded.

In the early years growers produced Russets, Ben Davis, Rhode Island/Greenings and Baldwins. As recently as 1961 there were still 22 varieties grown in commercial quantity in Grey County. Today, while some growers still produce a few early varieties such as Margaret Pratts and Quintes to get a jump on the season, most of the orchards produce McIntosh, Spies and some Delicious.

The bright days and cool nights that characterize the Beaver Valley's climate are particularly well suited to growing McIntosh and Spies. Dessert quality apples with good colour, Macs can be eaten right off the tree. Spies require after-harvest ripening to reach their peak flavour and colour, and are better for winter storage. These varieties not only grow best in the Beaver Valley, they are also among the most popular with consumers.

According to food historian Waverly Root, apples probably originated in the Baltic Sea region of northern Europe. There is some archeological evidence that apples were cultivated as early as 6500 B.C. Certainly the Egyptians were accomplished apple growers by the 13th Century B.C.

English settlers brought apples to North America both as seeds and as cuttings. Only grafted cuttings will yield the same variety—apples do not breed true from seed. John McIntosh, who farmed in eastern Ontario in the early 19th century, recognized the superior quality of the apples from one of his wild trees. In 1835 his son Allan learned how to take grafts from the tree and attach them to rootstocks of other apple varieties. All McIntosh apples today are descended from that one area.

Wild apple trees around the foundations of abandoned farms in Grey County attest to the fact that the earliest settlers kept a few apple trees for their own use. A Methodist minister, Heman Hurlburt, is credited with planting the first orchard in the area in 1846.

By the 1880s apple orchards were becoming well established. The first apple storage plant was built by Mathias Snetsinger in 1895. In 1905, a group of growers got together to form the Georgian Bay Fruit Growers, and the Beaver Valley Fruit Co-operative was established in 1922.

From the beginning the Mitchell family were major players in the Georgian Bay apple industry. John Mitchell, one of the founders of the Georgian Bay Fruit Growers, experimented with several varieties of apples and plums and at one point, had 110 different varieties of these two fruits growing in his orchards.

In 1932 George Mitchell built the first cold storage facility and apple packing plant in the area, where Mitchell brand apple juice, apple vinegar and apple sauce were produced. The new facilities gave the apple industry a major boost. The com-



pany has been sold several times since the 1930s, but the familiar black Mitchell label can still be seen on supermarket shelves today.

In a century of apple production, methods of growing, harvesting and storage have greatly improved. In the early 1900s, horticulturists from the Ontario Agricultural College (OAC) in Guelph brought their knowledge of pruning and spraying techniques to the Georgian Bay region through a series of demonstrations for growers.

The importance of spraying to control insects and disease was brought home with dramatic results in those early years. Growers who followed the OAC guidelines sold their perfect apples for \$6.00 a barrel. Those who thought spraying was unnecessary sold their blemished fruit at 30 cents per 100 pounds to the processing plant.





Because the Beaver Valley is geographically isolated from other apple-growing areas in Ontario, it offers a unique situation in which to study pest control. Agriculture Canada scientists recognized this fact in the late 1960s, and began an insect pest monitoring program which is still running today, making it the longest-running of such programs in Ontario. It is directed toward reducing the use of

had about 27 trees per acre. Apple trees in those days were large, making them difficult to spray and prune, and making the harvest a slow and laborious task. But around the mid-1950s, Tom Chudleigh, an apple grower in the Milton area, established some dwarf trees, and it soon became obvious that they made for more profitable apple growing.

With dwarf and semi-dwarf trees,

Apple storage has also seen progress. Since the 1950s, apples have been stored in controlled atmosphere (CA) storage, in which the amount of oxygen and carbon dioxide in the air is adjusted, effectively putting the apples to sleep until they are required for market. In controlled atmosphere storage, apples picked in the fall can be kept in perfect condition until July of the next year.



*“Sheltered by the hills . . . an ideal spot for fruit growing.” — James Carson, 1835*

pesticides, and using those that are the least damaging to beneficial insects.

Growers co-operate with scientists by keeping track of the numbers of insects caught in traps throughout the orchards. By combining this information with information on local weather conditions, growers can be more specific about where and when they need to spray, thus reducing the overall amount of spraying required.

Improved horticultural techniques have resulted in orchards very unlike their century-old predecessors. The earliest orchards in the Beaver Valley would have

growers can now plant far more trees than they could in the past. Beaver Valley orchards have anywhere from 150 to 330 trees per acre, depending on the rootstock used. The orchards are far more productive, the smaller trees are easier to maintain, and picking is easier.

Orchards in the Beaver Valley are gradually being switched over to dwarf trees. Every year for the past five years, 160 hectares (400 acres) of new dwarf trees have been added to the area's orchards. At some point in the future, these new orchards will replace the last of the big, old trees.

If you want to visit the Beaver Valley, come in the spring, when the air is heavy with the fragrance of millions of pink and white apple blossoms, and Thornbury holds its Apple Blossom Ball. Or come in the fall, and take part in the harvest festivities. You can visit the Apple Harvest Craft Show at the Meaford and St. Vincent Community Centre. Or take a guided tour through Binkley's packing plant, and find out more about how apples are picked, sorted, and stored.

Spring or fall, a trip to the Beaver Valley will give you a new appreciation for apples.



THE HAMILTON AREA IS A STUDY in contrasts: from the mountain top down to the lakeshore; from the clamour of industry to the quiet natural beauty of forests, waterfalls and gardens; from the hustle-bustle of a big city to the peace of small towns rich with reminders of the past. And you'll discover all this and more on CUESTA's tour through this diverse area.

Rather than lay out a specific tour route, with detailed directions, this CUESTA tour is designed to let you choose your own route—visit all the sights or save some for another day. Roads and highways are all well marked and our map will show you where to find attractions.

Even if you think you already know this area, read on—you'll be surprised at the new things you'll discover. If you're a newcomer, this tour will give you a first taste of this fascinating corner of the Niagara Escarpment.

Don't forget your camera and plenty of film and you might want to bring along some binoculars—this is a CUESTA tour with a difference!

Just a note, for more information on the conservation areas in our tour call the Hamilton Region Conservation Authority (HRCA) at (416) 525-2181.

#### **Royal Botanical Gardens**

With six feature gardens, spread across more than 2,700 acres, plus extensive natural areas, greenhouses, horticultural courses, special events and displays, the Royal Botanical Gardens (RBG) are a must for any visitor to this area—even if you don't have a green thumb.

If you're a Bruce Trail hiker—or would like to learn more about this trail—you won't want to miss Raspberry House, home of the Bruce Trail Association, located on the grounds of the RBG's Arboretum. The headquarters of the Royal Botanical Gardens, the RBG Centre, is at 680 Plains Road West (Hwy. 2) in Burlington.

#### **Dundurn Castle**

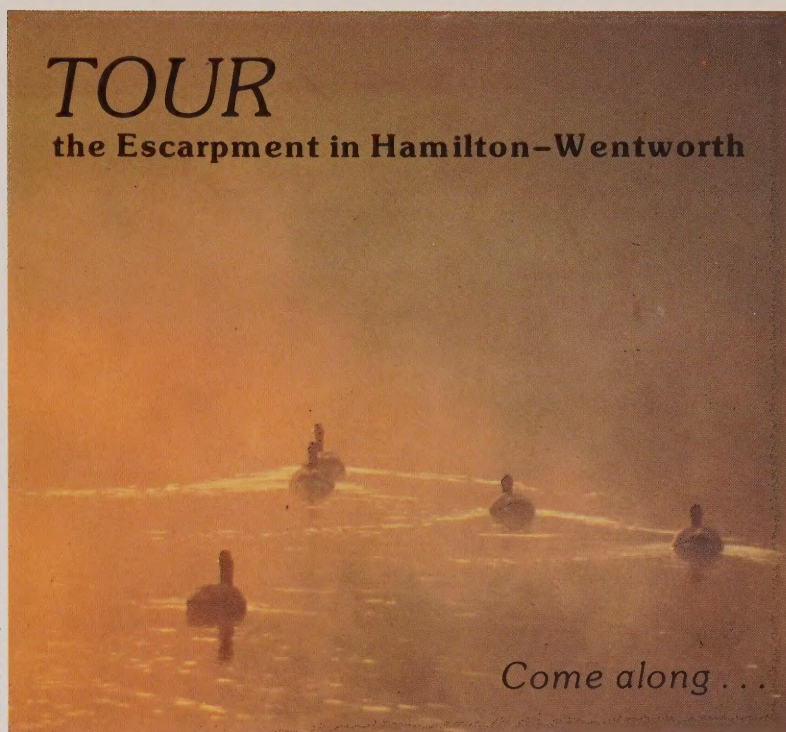
This elegant mansion, surrounded by acres of parkland high atop Burlington Heights, was built in 1835 as a residence for Sir Alan Napier McNab, Prime Minister of the United Province of Canada from 1854 to 1856.

The Castle has been restored to 1850's splendor. Step back in time to a more gracious age as guides in 19th century costume demonstrate domestic arts from yesteryear and lead you through more than 30 exquisitely furnished rooms.

For information, call (416) 522-5313.

#### **Christie Conservation Area**

Christie Reservoir, for swimmers and non-power boats (which you can rent or bring), is edged with 365 metres of supervised sandy beach. Pavilions, children's



G. STRAUMANS, H.R.C.A.

play equipment and hundreds of picnic tables scattered across acres of grassy parkland all help explain why this is such a popular family spot. The ponds in the park are stocked with trout so you might want to bring your fishing rod—in season of course!

In winter Christie is perfect for cross-country skiing, snowshoeing and skating on the frozen ponds.

#### **Crook's Hollow**

Crook's Hollow Road, off Hwy. 8, twists and turns as it takes you through the Hollow.

It may be hard to imagine now, but this quiet place was once a thriving industrial centre. Between 1813 and 1826 James Crooks built a minor empire here, including a sawmill, general store, barrel factory, blacksmith's shop, woollen mill, distillery and tannery. Today, overtaken by time, the Hollow is a peaceful park of gentle green hills along the banks of Spencer Creek.

#### **Spencer Gorge/Websters Falls**

From the Spencer Gorge Wilderness Area parking lot, off Fallsview Road, a half-kilometre trail wanders past an old cemetery and through the woods along the rim of the gorge to Tews Falls and its lookout platform.

Return via the trail to Websters Falls, where Spencer Creek tumbles over the

Escarpment. Enter adjacent Websters Falls Park, owned by the Town of Dundas. Near the top of the falls is a stone and steel rail staircase that will take you down to the mist-filled gorge at the base of the falls.

#### **Town of Dundas**

The Town of Dundas, first settled in 1787, was once an important mill town and the premier trading centre at the western end of Lake Ontario. The Desjardins Canal, built in 1832, once linked the town to the lake. The classic beauty of the town hall on the main street is a reminder of the town's ambitious past.

#### **Dundas Valley Conservation Area**

The Trail Centre, housed in a reconstructed Victorian railway station, is the hub of activity for this 1000 hectare park. The Centre provides maps for exploring more than 35 km of trails as well as picnic areas and a food concession.

The entrance to the Dundas Valley Trail Centre is at 650 Governor's Road.

Be sure to visit the Hermitage, built in 1855. The woodland trail leading to the ruins of this once magnificent mansion is always open to visitors.

#### **Town of Ancaster**

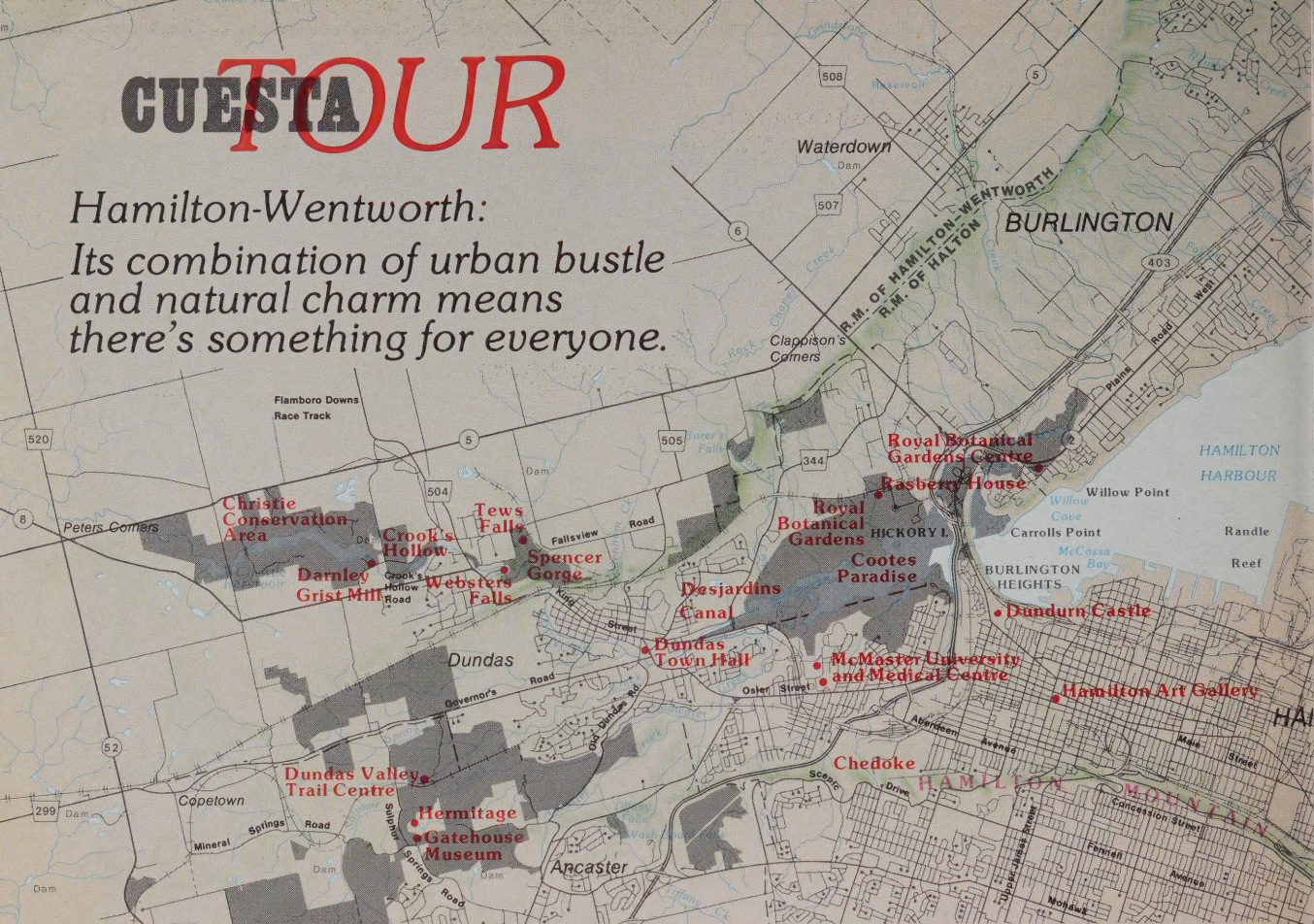
The scenic Town of Ancaster was first established as a trading post in 1795. There are many restored historic buildings along the main street of the town.



# CUESTA

## Hamilton-Wentworth:

*Its combination of urban bustle and natural charm means there's something for everyone.*



## Come along...

### Felkers Falls

Felkers Falls Conservation Area is on Ackland Street, off Paramount Drive, in the City of Stoney Creek. Here, in the midst of a suburban development, is a unique park with a waterfall, views and woodland trails. A very special feature of the park is the Peter Street Trail especially designed for use by the visually handicapped and those in wheelchairs. The trail is named in memory of Peter Street, for his efforts on behalf of the disabled.

### Devil's Punch Bowl

On Ridge Road, east of Hwy. 20, look for the parking area of the Devil's Punch Bowl Conservation Area. Here a ribbon waterfall plunges 10 storeys into a deep gorge, exposing layer upon layer of Escarpment rock and creating this geological gem. Take care here; the steep rim of the Punch Bowl is fenced but there are sharp drops along the edge of the Escarpment.

### Ridge Road Scenic Drive

Ridge Road just east of the Devil's Punch Bowl offers spectacular views out over the city and lake.

Look for the signs marking Edgemount, the Erland Lee House. This century old house, now a museum and archives, is the birthplace of the Women's Institute, an organization which began here in 1897.

### Battlefield Park

Located on the site of a War of 1812 battlefield, this park is a reminder of an important chapter in Canadian history. After the brief but pivotal battle fought on a June morning in 1813, the wounded were taken to the nearby Gage home. The house, riddled with musket shot, survived to become the carefully restored Battlefield House Museum.

### City of Hamilton

During the days when waterfalls turned the mills of industry, the neighbouring towns of Ancaster and Dundas outranked Hamilton as urban centres. It was the coming of the railroad and the age of steam that turned George Hamilton's townscape at the junction of several trails into the major city of this area.

The Escarpment, the "mountain" to locals, has always figured largely in the history and development of the city. It proved quite a barrier to early settlers when treacherous switch-back toll roads were often closed by mudslides. In the early part of this century, two incline railroads carried traffic up and down the Escarpment slopes (see article in CUESTA, 1987) but these are long gone now, replaced by highway cuts connecting the two parts of the city.

The downtown core with its fine restaurants, hotels, shopping, farmers' market, museums, theatres and nightlife has much to offer so be sure to allow yourself plenty of time to explore. The nearby Hamilton Art Gallery exhibits some of the world's most beloved art treasures and works by local artists.

The city's west end is the site of renowned McMaster University and its Medical Centre.

The harbour, once known as Burlington Bay, is always fascinating. As well as being one of the major inland ports on the Great Lakes, it is also a mecca for boating enthusiasts and boasts a large sailing school.

Even though this is a modern urban centre, Hamilton has not forgotten its past. Early Victorian buildings, constructed of durable Escarpment stone, survive alongside more modern architecture.





Photo by: Battlefield House Museum

Battlefield House Museum

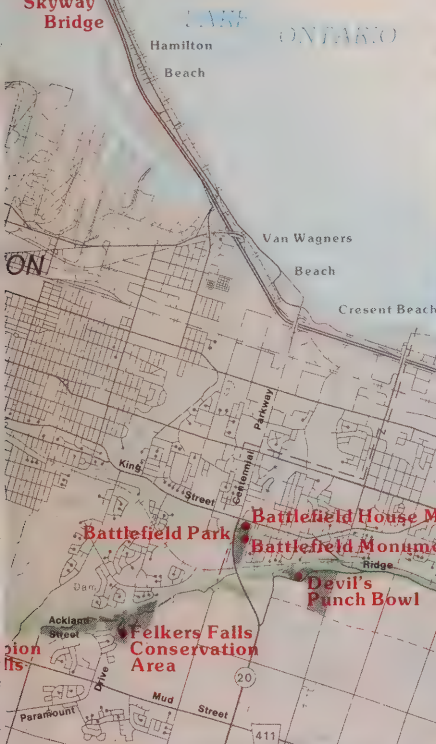


Lilac Dell, Royal Botanical Gardens



Dundurn Castle

urlington  
Skyway  
Bridge



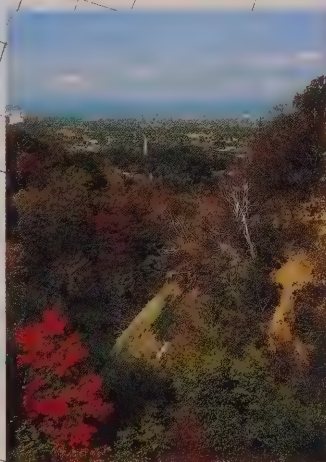
The Hermitage, Dundas Valley



Crook's Hollow

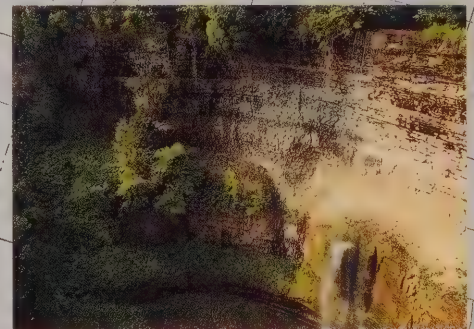


Felkers Falls

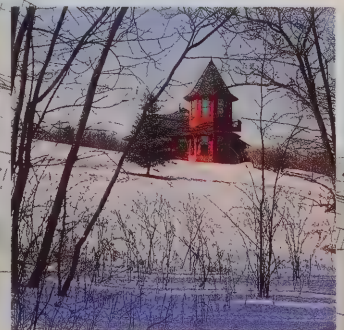


View from Devil's Punch Bowl

Photo by: G. Perley



Tews Falls



Dundas Valley Trail Centre

Photo by: P. Reynolds (HAC.A)



*There was timber for the taking  
— even if they had to move mountains.*



## WOODCHOPPER'S HAUL

*by Andrew Armitage*

AT SUNDOWN, JUNE 1, 1881, HORACE Lymburner, his 18-year-old son Robert, Bob Connolly and two millhands from Horace's Big Bay mill rowed away from the Jane Miller heading for the shore of Bruce Peninsula. They landed at a point about halfway between Dyer's Bay and Cabot Head. They were timber cruising.

It was Andrew Porte, Captain of the new packet steamer, who had told Horace about the small stream that fell down the escarpment near the Georgian Bay shore up in Lindsay Township. Lymburner had nearly exhausted the timber in the Big Bay district 18 miles from Owen Sound and was looking for a new mill site.

Maybe this improbable shoreline and the towering cliff had some promise, but it didn't seem likely. The escarpment was 200 feet high where the stream came down. There was a cramped beach of great dolomite slabs and poor anchorage off the shore. Porte reported that there was a lake up near the escarpment's edge and good timber around its shores. Still, it didn't seem likely.

Sixty-one years later, Robert Lymburner would remember: "Father and Bob Connolly made the circuit of the lake (and) said enough timber for 25 years." It was a fair prediction; the mill at Gillies Lake would cut timber for 24 years, one year

less than old Horace himself had reckoned.

Gillies Lake clings to the top of the escarpment like a teacup balanced on the edge of a saucer. Two miles long by a half wide, it is a narrow strip of blue on the map of the peninsula. Nearly bottomless in places, the small lake is rich in marl and lake trout. At its eastern end the lake shallows out to a bed of sand and gravel. Here and there are the ruins of low stone walls and rotting timbers. A few hundred feet further the escarpment falls 200 feet to the water.

Horace was a lumberman. He added it up. A lake that a small tug could steam across drawing the cuttings from the rich



mixed forest. An outlet from the lake close to the cliff where logs could be dropped to the beach below. A good head of water coming down the rock to power his saws. Space enough maybe for a mill pond, loggers' cabins, and piles of timber. The waters of Georgian Bay for transport to markets south.

The Lymburners would move north! It would be a small mill, only one mill among thousands in 19th century Ontario. But the mill on the shore below Gillies Lake would become a symbol of the inventiveness of the pioneer mind, one more example of finding a way, making do simply because there was a need.

First the Lymburners had to move the old mill from Big Bay to the new site. They spent that first summer carving out a shallow basin that would fill with the water rushing down the cliff. Next to the mill pond among the newly cleared tangle of sumac and scrub the mill went up. A rough building perched to the south. It would be the winter home of workmen for years.

The water wheel, saw frame and other machinery were next. They came up on the Jane Miller but with no dock yet built there was no way to land the heavy load. On to Lion's Head the machinery went where it would stay until the first heavy snow when it would be loaded on sleighs and drawn over the primitive roads and along the shore to the millsite.

All through that first winter Lymburner's men cut trees. The pine, cedar, ash and maple were dropped and limbed and snaked to the edge of the escarpment. There they were toppled to the rocks below, one tree falling on the others as huge piles of logs grew in tangled heaps. About 200,000 feet of board lumber lay in a jackstraw mass waiting for spring.

It was dangerous work for the loggers. The logs were frozen one to another until mid-summer and prying each one loose with a peavy could be as fatal as working a log jam in a lumber choked river. For two summers they laboured on the piles of logs, many broken and mutilated by the fall from the cliff. Still, they were able to saw lumber and the first shipment was ready that fall.

The schooner Nellie Sherwood came that autumn to take off the lumber and shingles. She was a doomed ship. Leaving the dock low in the water from the Lymburner's load the Nellie made only a few miles out into the bay when, still in sight of the mill, she sank in the teeth of a sudden gale. All hands were lost.

It was the same gale that took the Asia to the bottom not many miles to the north. More than 100 lost their lives in that sinking. Nor was the Nellie Sherwood the only tragedy to touch the new mill. The year before, just after the Jane Miller's futile attempt to land equipment at the millsite, the



*Gillies Lake: A hundred years ago, the overflow from the lake was harnessed to change the face of the Escarpment.*

little steamer disappeared in a snow storm in Colpoy's Bay.

Horace and Robert Lymburner had another problem: how to deliver the cut logs from the lake above to the shore below without damaging them or piling them in windrows. The key, they thought, might lie in the discharge of Gillies Lake.

After leaving the small lake, the overflow made its way to a fissure in the rock cliff where it disappeared to emerge near the bottom of the escarpment. If they could build a sluiceway at the outlet of Gillies Lake, the Lymburners could control the force of water descending the mountain. And if they could control the water level

they could also build a flume of heavy sawn lumber from the small lake to the edge of the cliff. How easy to float the logs to the brink instead of hauling them by hand or horse!

There was still the uncontrolled crashing of logs down the face of the rock. Horace and Robert put their minds to the problem and found a solution the next year. In 1883 they attacked the dolomite escarpment. The answer was to change the slope and face of the cliff itself. The means would not be dynamite but the harnessed power of water.

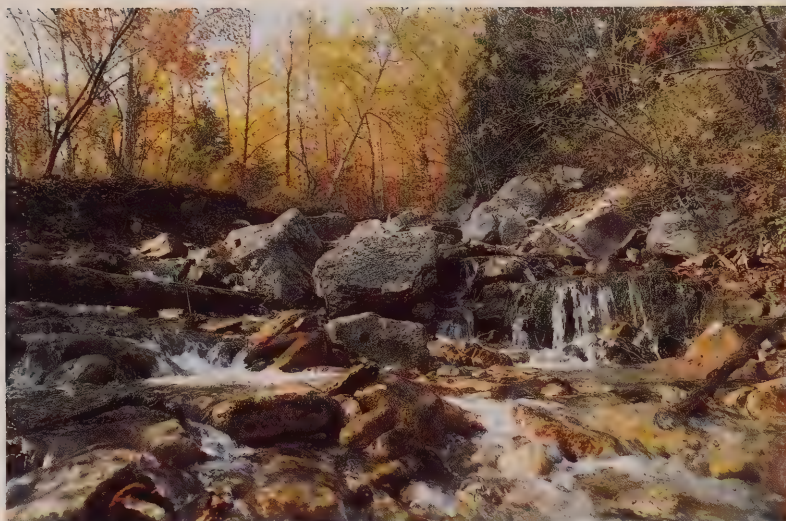
Why not, the Lymburners asked themselves, remove the end of the log-



WILLY WATERTON

*Remnants of the log flume: The heavy sawn lumber rots as the forest recovers.*





*Overgrown sluice-way: "In 1883 they attacked the dolomite escarpment. The answer was to change the slope and face of the cliff itself."*

carrying flume back from the edge 12 feet or so and then build up a good head of water behind the sluiceway? In turn, the water would be released to pound against the edge of the escarpment. They tried it. With the first release of water hitting the ground's surface for 10 minutes they got results.

About 700 tons of rock, gravel and dirt were carved away and sent thundering down the cliff. Another section of the flume was removed and the water went to work again. And then again. After the third cascade and less than two hours later, the work was done. About 2,000 tons of escarpment had been removed and a 55

degree grade down to the mill pond had been sliced from the cliff.

It was easy to construct a heavy timbered flume to descend the cliff. It was even easier to send the cut logs sliding down the chute to the mill pond where they floated gently until needed for sawing. Later, the flume would be extended so that the logs kept right on going past the mill, over the beach, to fall unharmed into the waters of Lake Huron.

There they were formed into booms and towed away, away to Lion's Head, the seven mills at Wiarton, or all the way to the vast works at Owen Sound. The mill was complete.

Working with alternative heads of power that ranged from 28 to 33 feet, the Lymburners were able to cut up to 25,000 feet of lumber in less than 12 hours. There was an insatiable demand from the south for planks and shingles, railway ties and timbers. With the closing of the decade timber close to Ontario markets grew scarce.

The Lymburners and their imagination worked on and on. They put a tug, the Gertie, on the lake above in order to move logs even faster. Winter after winter they cut away at the forest. Summers came and went and the water rushed down the now worn flume. There were no fires, no serious accidents. They did lose one man off the Gertie up in the lake, but generally the loggers liked working for the Lymburners.

The 24th year came and the timber was nearly gone. Robert sold the mill to Charles Pedwell in 1905. He stayed on to cut a half million shingles and then turned the operation over to the new owner. In the spring of 1920 Robert Lymburner returned to Gillies Lake in order to give an estimate of the remaining stocks of timber. He found only \$30,000 worth between Hope Bay and Tobermory.

He went back from time to time as the years passed. In the 30's he returned to find the old mill site nothing but a tangle of burned buildings, rotting timbers, a "horrible" jumble of stone and rotten wood.

The trees have come back up around Gillies Lake. They have had nearly eight decades to grow. The reds and yellows and oranges are breathtaking in the fall, a good time to climb up the old flume-way cut in the escarpment, the poison ivy of summer gone.

Gone too is nearly all the evidence of the Lymburner's mill and their marvellous flume. An historical marker stands beside the road from Dyer's Bay to Cabot Head. Park there and walk around. Read the words on the plaque and look at the low beach that once held acres of sawn lumber waiting shipment. Imagine the mill and the cascading flume that sloped down the hill to the pond.

Walk up the flume and you will find where the gentle stream falls into the rock and disappears. Look for the old stone walls of the sluiceway and out over Gillies Lake. Eat your lunch on top of the escarpment while looking out over the broad waters of Georgian Bay.

Pay close attention to the rotting squared logs and planks that you will see scattered down the cliff. They will not be there long as nature heals the wounds that the Lymburners made. But there will be one feature of the past that will never change, the gap in the escarpment cut by the harnessed waters of Gillies Lake.



*The beach at Dyer's Bay: Timber crashed down the slope to the beach—"Huge piles of logs grew in tangled heaps."*





# FIRST CLASS!

by Rilla Hewer

THEY CROUCH LOW OVER THE handle bars, their eyes grim with determination. Faces are clenched with concentration, slick with the sweat of the struggle. Muscle and sinew scream as they're forced to respond again and again—pushed to their very limits and then beyond.

This is not the bicycle riding you knew as a kid—this is world class cycle racing and few sports can match it.

At curbside, you find yourself caught up in the drama; the riders come flying past, only inches away, and in the wind of their wake you feel the agony of their effort.

Each summer some of the world's best racers come to southern Ontario to test their skills and stamina in Canada's premier event—the Niagara Classic.

In the 1988 Classic, Canada's National and Provincial teams competed in a field of over a hundred riders that included American State teams and the National teams of New Zealand, France and the United States as well as many international professional teams.

In just six years the annual Niagara Classic has become North America's answer to the "Tour de France". And while there may be no Alps to challenge racers along the route of the Classic, there is Ontario's Niagara Escarpment. The riders aren't here to enjoy the Escarpment's wide





vistas, hiking trails and parks, they're here for the gruelling climbs and heart-stopping descents that make this event, "the most demanding bicycle racing east of the Rockies."

"Because we don't have long mountain climbs, we go up and down the Escarpment again and again—over 50 times," explains Race Director Tim Ferrar.

"The Escarpment climbs are all really tough," agrees Matt Eaton of Pennsylvania, a former U.S. National Team member who has competed in two Classics and hopes to return again this year. "With mountains, even though they're longer, once you're up, you're home free. But the Escarpment climbs are much tougher mentally, because you know there's always another one. It's hard, very hard but it's a great race with a real European flavour."

Each year the race gets bigger and better. This year the Niagara Classic has been named the Canadian National Tour, official recognition from the cycling world that it is the longest internationally sanctioned race in the country.

Organizers are not looking to increase competitors (there's a limit to the number who can race safely,) but the interest the race generates, the attention it attracts, and the size of the purse are all growing. This summer's entrants will be competing for more than \$35,000.

Like the "Tour de France" the Classic is a stage race, one race overall composed of a series of individual races, known as stages, held in rapid succession over nine days. The formats of the stages are varied to test the riders' hill climbing and handling skills, speed and physical endurance, strategy and determination.

Every stage is a separate event, with its own winner and prizes. Riders who win or place well in a stage are awarded bonus time points, toward their overall time and

standing. The cyclist with the best time over the entire 1,078 km wins.

They carry on despite crashes, equipment failures, weather conditions and fatigue. Speed is important but endurance and perseverance are the real key. Last year, New Zealand racer Brian Fowler didn't win any stages but placed well enough in all of them to emerge as the final victor.

The Classic is longer than many other races of its type. This year the men's event will be held from August 12 through the 20th, with eleven stages and the women's

## Speed, endurance, perseverance

event will be held separately during the first three days of June.

The Classic begins with a time trial race from the base to the top of the Scarborough Bluffs. The winner of this first race wears the yellow leader's jersey into the second stage.

On the routes around and between St. Catharines, Dundas, Stoney Creek, Hamilton, Waterdown, Burlington and Milton, the Escarpment tests the resolve of even the most determined rider. This is where the Classic is won or lost.

Even racer Paul Murray, who lives and trains on the Escarpment near Stoney Creek, finds the climbs of the Classic an ordeal. "Going up the long steep climb of the Escarpment in Dundas was probably the most difficult part of the race last year," he recalls, "and the heat reflecting off the rock face of the Escarpment made it especially brutal."

Through all the city races and road races, and up and down the Escarpment slopes (and up and down and up and down again and again) the cyclists mark their performance by how far ahead the yellow jersey is.

These are all superbly conditioned and highly motivated athletes but not all of them will make it to the end. Accidents and injuries take some riders, discouragement and exhaustion take others; the Escarpment exacts a heavy toll.

After the final race around the CNE grounds on Toronto's lakefront, the coveted winner's jersey and other prizes are given to the victorious individual riders and teams. There's a "King of the Mountain" award to the best climber and riders who demonstrate outstanding talent or exceptional effort are recognized.

But anyone who finishes is a winner, if only for surviving the Classic's toughest challenge—the challenge of the Niagara Escarpment.





# Flowerpots



*Flowerpot Island.*

THEY STAND LIKE MYSTERIOUS stone watchtowers guarding the rugged, cliff-lined east coast of the Bruce Peninsula.

In other parts of the world these peculiar pedestal formations are called sea stacks, monoliths or pillars but a more domesticated soul in Ontario thought they looked like giant flowerpots, and here, flowerpots they have remained.

The flowerpots are Escarpment rock, older than recorded history and fearful mythology surrounds their creation. Legends tell tragic tales of Indian lovers petrified in rock for eternity and at least one Indian tribe would not set foot on Flowerpot Island because it was an "evil" place. Over a hundred years ago the early settlers dubbed the flowerpot at Dyer's Bay the Devil's Monument and the sinister name has stuck.

In mortal time these formations are an-

cient but in the diary of the Escarpment's geological history they are a fairly recent page.

And, like a diary, they offer vital clues for geologists trying to piece together the story of the forces that shaped the dramatic Bruce Peninsula landscape thousands of years before the dawn of humanity. Because these are shoreline features, created by the action of waves on the exposed cliff face of the Escarpment, and because one pops up almost half a kilometre from the shore of Georgian Bay, the flowerpots document the ebb and flow of the Great Lakes.

The levels of the lakes today are relatively stable but it wasn't always so. As the Wisconsin ice sheet, the last great continental glacier, melted and retreated, enormous amounts of meltwater were unleashed, creating the ancestors of today's Great Lakes.

About 12,500 years ago the first of these giants, post-glacial Lake Algonquin, submerged the Bruce Peninsula. Only the highest points of land, such as Cabot Head, were exposed as islands. Today the oldest flowerpot on the peninsula sits high above Georgian Bay on top of Boulder Bluff, Cabot Head.

Although Lake Algonquin was some 7 metres higher than today's lake, the wave-cut features on Cabot Head are another 69 metres higher than the level of the lake that created them. This anomaly is due to an effect called "isostatic uplift", a phenomenon you can recreate in your own kitchen by pressing down on a loaf of bread. After you take your hand away, the bread begins to return to its original thickness. In this case it was a glacier almost two miles thick that compressed the land and when it left, the earth's crust began to rebound. Today, slowly and





*Devil's Monument, Dyer's Bay.*



*Along the Little Cove shoreline.*

## WHEN THE LITTLE SPIRIT SPOKE

Flowerpot Island was Manitoueses, "the island off the long point that jutted out into Lake Huron"—a forbidden place, home of the lesser devils and the Little Spirit.

One night long ago, during the Moon of Strawberries, the taboo was broken. Shining Rainbow, beautiful daughter of an Ottawa chief, and Bounding Deer, son of an enemy tribe of Chippewa, had met during a brief time of peace. Their love was strong and, disobeying her father, Shining Rainbow promised to leave her people and go with Bounding Deer to his land.

They left by moonlight, their canoe flying swiftly over the dark water. But soon many canoes of her tribe gave

gradually, the land continues to rebound back to its original height.

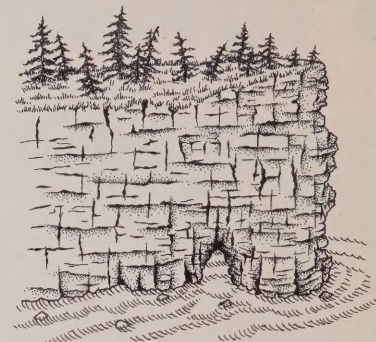
In time, new river systems opened up and Lake Algonquin eventually drained away to the east. The retreat of the glacier was an agonizingly slow, stop-and-start process and several thousand years later more meltwater created Lake Nipissing. The Bruce Peninsula was again underwater with headlands and high points forming an archipelago of islands. It was during this phase that the flowerpots at Lion's Head and Dyer's Bay were formed.

Lake Nipissing gradually gave way to the lower levels of Lake Algoma and further stacks were formed at Little Cove, Cave Point, on Bear's Rump Island and, the most famous of all, the two on Flowerpot Island.

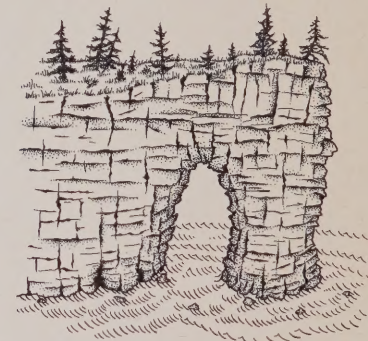
The waves of Georgian Bay still pound against the Escarpment rock, cutting caves and grottos and eventually, forming new flowerpots.



## A FLOWERPOT FORMS



*A rocky headland is exposed to pounding waves from both sides.*



*Wave action widens the gap from below; the arch grows in height as weakened rock falls from its roof.*



*A flowerpot remains after the roof of the arch collapses.*

*Cuesta would like to thank Mark Bowes, Darrell Gamble and Dr. A.G. McLellan for their assistance.*



# NIAGARA ESCARPMENT PLAN UPDATE

Some 450 million years ago a vast area of Southern Ontario and Michigan was covered by a shallow tropical sea.

It was by the shore of this sea that the Niagara Escarpment was formed, as skeletons of primitive water creatures and debris from ancient mountains were compressed into massive layers of reef structures and sedimentary rock.

The waters retreated and, over succeeding millions of years, erosion from the elements, ancient rivers and lakes, and glaciers sculpted the layers of rock into its present form.

The Niagara Escarpment is 725 kilometres long and bisects the southern portion of the province, creating a unique geological and ecological landscape.

Recognizing this natural and cultural treasure, the Ontario government devised the Niagara Escarpment Planning and Development Act (1973) which led to the creation of the Niagara Escarpment Plan (1985), Canada's first large-scale environmental land-use plan. The public consultation to arrive at the Plan involved thousands of people over 12 years.

The Plan's seven land-use designations encompass 183,000 hectares in eight counties and regions and 37 local municipalities. It ensures that the Escarpment and lands in its vicinity will be maintained substantially as a continuous natural environment, and it strikes a balance between conservation, protection and compatible development.

The Niagara Escarpment Commission (NEC) is most directly responsible for implementing the Plan, reporting to the Legislature of Ontario through the Minister of Municipal Affairs.

While the NEC may be most visible, other ministries and agencies share in the Niagara Escarpment Program, including the Ministry of Municipal Affairs, the Ministry of Natural Resources, the Ministry of Culture and Communications (via the Ontario Heritage Foundation) and the Ministries of the Environment, Agriculture & Food and Tourism & Recreation, among others.

The Ontario Heritage Foundation plays a key role in advancing the program, administering a 10-year, \$25 million trust fund.

The fund was created by the Ontario Government to acquire lands for the Niagara Escarpment Parks System and the

Bruce Trail, and to support conservation of significant natural and cultural properties. A portion of the fund goes to promoting wise land management and to increasing public awareness and appreciation of the Escarpment.

It's been a busy and productive year for the Niagara Escarpment Program. Among the activities, events and initiatives are:

- In April 1988, the NEC sponsored an Escarpment forum in Mono Township for public interest groups. This was the third in a series of workshops that began with meetings for municipal representatives in late 1987.

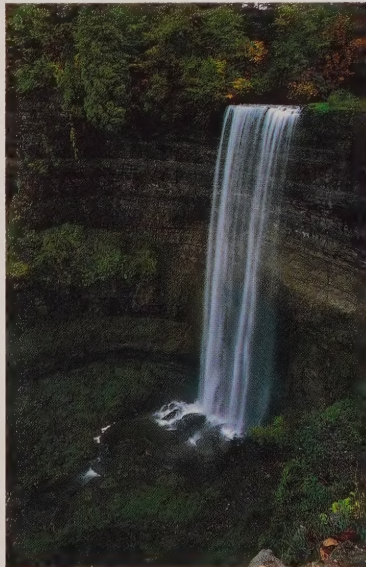
Following the forums, the Ministry of Municipal Affairs contracted an independent study of the Niagara Escarpment Program, as part of the government's ongoing series of regular program evaluations. The CRESAP Report is the result, an evaluation of the progress and performance of the Escarpment Program as it relates to links between Provincial ministries and agencies within the program.

The implementation of CRESAP's recommendations is being pursued by the ministries and agencies involved.

- The Regional Municipalities of Halton, Hamilton-Wentworth and Niagara syn-

chronized their official plans with the Niagara Escarpment Plan. By being "in conformity", these regional plans now afford the same degree of environmental protection as the Escarpment Plan within the Escarpment area of each region.

- The Ministry of Natural Resources and the NEC worked together to improve review procedures for Ministry of Transportation wayside pits—temporary, nearby sources of aggregate for public road construction. After second reading of the Aggregate Resources Act (Bill 170), it is proposed that wayside pits will become subject to the NEC's development control process.
- For the third year in a row, applications for development permits in the Escarpment area continued at historically high levels.
- There have been more than 50 amendments to the Plan proposed since June 1985. To date, 19 have received Ontario Cabinet decisions. Of note: an amendment to allow for in-home tourist accommodation in rural areas of the Escarpment. Also under consideration is an amendment to prohibit sanitary landfills in the Escarpment area except by specific amendments to the Plan.
- The Conservation Land Act Property Tax Rebate Program is now in effect. The program provides for property tax rebates (retroactive to 1987) to owners of "provincially significant" lands, including lands designated "Escarpment Natural" in the Niagara Escarpment Plan.
- The Bruce Trail Project began in December 1987 with staff from the Ministry of Natural Resources, the Bruce Trail Association (BTA) and the Ministry of Government Services under the direction of the BTA. Work includes a plan for trail completion and management, working with volunteers to choose an ideal route, new property acquisitions, and doing an inventory of properties along the route.
- A pilot project out of the University of Guelph conducted in the spring and summer of 1988, for the Natural Heritage League, revealed that the great majority of Escarpment landowners are committed to protecting natural heritage features on their properties (see page 2). The study has been given the go-ahead to continue through to 1991.



NEIL HESTER



